INTERNATIONAL SEARCH REPORT

International application No. PCT/CA2004/001797

A. CLASSIFICATION OF SUBJECT MATTER

IPC[7]: E04C 5/16; B32B 15/18; B23B 15/08

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) ipc[7]: E04C 5/7, 16; B32B 1/04, 15/08,18; E04B 5/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used) Delphion, Questel Orbit(rebar, re-bar, reinforcing, concrete, rods, shell, polymeric, thermoplastic, stress)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,620,401 B1 (L'ESPÉRANCE, C. et al.) 4 November 1986 (04.11.86) (the whole document)	1-5, 22-26, 38, 39, 76, and 82
x	CA 2,396,808 A1 (EDWARDS, C.M. et al.) 8 January 2001 (08.01.01) (page 9, line 1 to 7)	38 and 39
A	US 5,851,468 B1 (KAISER, M.A.) 22 December 1998 (22.12.98) (the whole document)	
A	CA 2,222,451 C1 (PETRINA, P.) 23 January 1997 (23.01.97) (the whole document)	

runer	documents	are I	isted in	the con	inuation	of	Box C	•

[X] Patent family members are listed in annex.

*	Special categories of cited documents:	calss
"A"	document defining the general state of the art which is not	considered
	to be of particular relevance	

earlier application or patent but published on or after the international filing date

document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

document referring to an oral disclosure, use, exhibition or other

document published prior to the international filing date but later than

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family

Date of the actual completion of the international-type search 14 January 2005 (14-01-2005)

Date of mailing of the international-type search report 25 February 2005 (25-02-2005)

Name and mailing address of the ISA/

the priority date claimed

Commissioner of Patents Canadian Patent Office - PCT Ottawa/Gatineau K1A 0C9 Facsimile No. 1-819-953-9358

Authorized officer

Bruce M. Brown (819) 997-2167

Form PCT/ISA/210 (second sheet) (January 2004)

INTERNATIONAL SEARCH REPORT Information on patent family members

International application No. PCT/CA2004/001797

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US4620401	04-11-1986	AT60104T T CA1238205 A1 DE3676855D D1 EP0199348 A2 JP61274036 A US4620401 A	15-02-1991 21-06-1988 21-02-1991 29-10-1986 04-12-1986 04-11-1986
CA2396808	19-07-2001	AU2771001 A CA2396808 A1 CN1394252T T EP1250499 A1 JP2004511683T T US6612085 B2 WO0151730 A1	24-07-2001 19-07-2001 29-01-2003 23-10-2002 15-04-2004 02-09-2003 19-07-2001

Form PCT/ISA/210 (patent family annex) (January 2004)